

of the West continued covered with snow throughout the month, which necessitated much feeding of stock.

At the close of the month the prospective water supply from the snow in the western mountain districts continued good in most central and northern districts, where large amounts of well-packed snow had accumulated. However, in New Mexico and portions of some adjoining States the accumulated depths of snow were below the averages, and the outlook for water was less promising.

#### RELATIVE HUMIDITY.

The relative humidity for the month as a whole was generally above the normal in the Rocky Mountain region and to the westward, also to the eastward in much of the northern third of the country. On the other hand the atmosphere was drier than usual for the season over most of the central and southern portions of the Rocky Mountains.

#### GENERAL SUMMARY.

The cold wave during the first few days of the month did much damage to truck crops in the Gulf and South Atlantic States, and also to peach buds in the Ozark district, in Arkansas, as well as in the Lakes Region and parts of the Ohio Valley. Much grape fruit was injured in the Southern States, and probably 50 per cent of the pineapples were destroyed in Florida. Citrus trees in northern and central Florida were defoliated, and the fruit was frozen on the trees, while many young trees were killed to the bank, but no general damage resulted in the southern part of the State.

The planting of corn, cotton, and sugar cane in portions of Florida, southern Texas, and the lower Mississippi Valley, and the replanting of truck crops in the Gulf and South Atlantic States made good progress under the warm and favorable weather during the latter part of the month, although it was too dry in much of Florida and too wet in some other Southeastern States for rapid advancement.

Winter wheat was considerably damaged from the Ohio Valley eastward because of the absence of snow cover, and there was a decided lack of moisture from the central and lower Missouri Valley southwestward to northern Texas, where the growth was poor. However, the northern part of the winter-wheat belt had a good snow cover and there was little or no damage. The crop was benefited by rain in California, but the condition was unsatisfactory in Washington.

Cold weather and snow caused some loss of stock in the Dakotas, Montana, Wyoming, and Utah, but stock was in good condition in Colorado, Idaho, and California. The conditions were favorable for ice harvest in all northern and central districts, and a plentiful supply was available for storage.

#### SEVERE LOCAL STORMS.

The following notes of severe storms have been extracted from reports from officials of the Weather Bureau:

*California.*—A storm of marked intensity prevailed over the entire State on February 24 and 25, 1917, and was accompanied by torrential rains and destructive winds, being most severe along the immediate coast. At Point Reyes Light a maximum wind velocity of 101 miles an hour was recorded, and at San Francisco windows and telephone wires were broken. At San Jose the storm was the indirect cause of the loss of three lives and

an extraordinary amount of damage resulted from the wind and water, while at San Diego several buildings were unroofed. Railroad transportation was delayed by the excessive precipitation causing snowslides in the high Sierra and landslides in the Coast Range. At Helen Mine, Lake County, the total precipitation for the three days, February 23 to 25, amounted to 16.73 inches, and of this amount 10.35 inches fell within a period of 24 hours.

*Alabama.*—On the afternoon of February 23, 1917, tornadoes and severe local storms occurred at numerous places throughout central Alabama, doing considerable damage to property and killing several people. One of the most severe of the tornadoes originated about 1 p. m. near Whitsitt, Hale County, and passed north-northeastward over Rosemary and thence northeastward over the northwestern portion of Perry County, killing six persons. Another destructive tornado, moving northeastward, struck Stewartsville, Coosa County, and Hollins, Clay County, about 3:30 p. m. of the same day, killing 10 persons. The paths of these storms ranged from two or three hundred feet to nearly a mile in width.

*Average accumulated departures for February, 1917.*

Districts.	Temperature.			Precipitation.			Cloudiness.		Relative humidity.	
	General mean for the current month.	Departure for the current month.	Accumulated departure since Jan. 1.	General mean for the current month.	Departure for the current month.	Accumulated departure since Jan. 1.	General mean for the current month.	Departure from the normal.	General mean for the current month.	Departure from the normal.
	° F.	° F.	° F.	In.	In.	In.	0-10.		P. ct.	
New England.....	21.5	-4.2	-3.3	2.40	-1.10	-1.40	5.7	+0.3	73	-1
Middle Atlantic.....	30.3	-2.6	-0.1	1.99	-1.20	-1.50	6.0	+0.5	68	-5
South Atlantic.....	47.1	-0.7	+4.9	2.49	-1.50	-2.30	4.6	-0.6	71	-4
Florida Peninsula.....	65.2	-1.6	+3.3	0.40	-1.60	-4.00	2.9	-1.3	74	-6
East Gulf.....	51.0	+0.2	+6.3	4.93	+0.20	+0.70	4.9	-0.6	71	-4
West Gulf.....	51.6	+2.2	+6.4	1.27	-1.40	-2.90	4.6	-0.3	67	-7
Ohio Valley and Tennessee.....	32.4	-3.2	-0.4	2.17	-1.40	+0.10	6.3	+0.1	71	-4
Lower Lakes.....	19.0	-5.7	-5.9	1.39	-1.10	-1.10	6.9	+0.1	80	0
Upper Lakes.....	10.5	-8.7	-10.9	0.89	-0.90	-1.60	5.9	-0.4	83	+2
North Dakota.....	-0.6	-7.6	-9.6	0.66	+0.10	+0.10	5.3	+0.8	86	+5
Upper Mississippi Valley.....	18.1	-5.5	-6.4	0.48	-1.20	-1.40	5.4	+0.1	75	-4
Missouri Valley.....	21.9	-2.5	+0.5	2.68	-0.80	-0.80	4.8	-0.4	72	-4
Northern slope.....	19.4	-2.1	-3.8	1.04	+0.20	+0.10	6.5	+1.3	73	0
Middle slope.....	33.8	+1.4	+4.2	0.32	-0.40	-0.30	4.3	-0.2	59	-8
Southern slope.....	47.6	+3.0	+5.3	0.40	-0.50	-0.30	3.6	-0.9	45	-17
Southern Plateau.....	43.5	-1.3	-4.1	0.35	-0.30	-0.20	3.1	-0.5	52	+4
Middle Plateau.....	28.7	-4.3	-16.0	0.80	-0.30	-0.70	5.0	-0.2	70	+3
Northern Plateau.....	30.5	-1.6	-5.4	1.28	-0.10	-0.70	7.8	+1.4	77	+2
North Pacific.....	40.3	-1.0	-2.2	3.86	-1.40	-4.10	8.1	+0.9	75	-7
Middle Pacific.....	48.7	-0.3	-3.5	4.66	+0.40	-1.80	5.1	-0.5	71	-6
South Pacific.....	53.3	+0.7	-1.7	3.60	+1.20	+0.90	4.4	0.0	70	-1

551.566 (261.1)

#### WEATHER CONDITIONS ON THE NORTH ATLANTIC DURING FEBRUARY, 1916.

The data presented are for February, 1916, and comparison and study of the same should be in connection with those appearing in the REVIEW for that month. Chart IX (xiv-18) shows for February, 1916, the averages of pressure, temperature, and the prevailing direction of the wind at 7 a. m., 75th meridian time (Greenwich mean noon), together with notes on the locations and courses of the more severe storms of the month.